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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,279	01/23/2004	Bryan A. Thurston	ALS-017CP	6483

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EXAMINER

CHUNG TRANS, XUONG MY

ART UNIT PAPER NUMBER

2833

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,279

Applicant(s)

THURSTON ET AL.

Examiner

Xuong M. Chung-Trans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. This is responsive to the communication filed on June 16, 2005. Claims 1-18 are pending in this application.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being obvious over Behning (USPN 5,067,909) in view of Ramsay et al (USPN 4,146,288).

As per claims 1 and 17, Behning discloses the invention substantially as claimed, comprising a first tubular connector body 1 comprising a housing having a first body portion 4 and first contact portions 2; a second tubular connector body 7 comprising a housing having a second body portion 6 configured to telescoping engage with the first body portion and second contact portions 8 configured to axially mate with the first contact portions; an annular collar 11 rotatively held on the first body 4, wherein the collar 11 encircles the first and second body portions 4,6 when the first and second body portions are engaged; a spring 17 disposed inside the collar 11, the ends of the spring being confined between the first body and the collar so as to resist rotation of the collar relative to the first body; at least one collar tabs 21 on the collar; and at least one receptacle tab 22 on the second body 6,7 axially opposed to the collar tab 21 for coupling the collar and first body 4 to the second body, wherein the collar tab 21 and the receptacle tab 22 have opposed flared cam surfaces 34 cooperatively producing

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rotation of the collar relative to the second body as the first and second bodies are telescoped to a mated contact position, the cam surfaces 34 guiding the collar tab 21 around the body tab, wherein the coiled spring 17 yields as the collar 11 is rotated by the tabs 21,22 and the spring 17 then rotating the collar tab 21 to a latching position axially behind the receptacle tab thereby releasably locking the connector bodies in mated contacting position. Behning does not explicitly disclose that the receptacle tab includes an inclined back surface that extends at a negative angle relative to an axis of rotation of the collar. Behning does disclose that the receptacle tab includes a back surface 36 to provide locking position, and Ramsay et al disclose such an inclined back surface that extends at a negative angle relative to an axis of rotation (col. 2, lines 9-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such an inclined back surface as taught by Ramsay et al into the invention of Behning to produce the claimed invention because Ramsay et al suggest that such an inclined back surface would provide a release from a predetermined axial tension (col. 2, lines 13-15).

As per claim 2, Behning teaches the collar tab and the receptacle tab are triangular in shape and a back surface remote from the points and intersecting the camming surfaces.

As per claims 3, and 18, Behning discloses that the angle of the angled back wall relative to a radial axis of the connector system is, for example, 5 degrees. See col. 2, lines 49-50 of Behning.

As per claim 4, Behning discloses the collar and first body have rotationally opposed stops (12,19) to limit rotation.

As per claims 5-7, Behning teaches the stops 12, 19 are disposed normally to position the collar in a matching alignment with the contacts and the tabs and the spring urges the collar stops (12) to a normal position striking the stops (19) on the first body, wherein the stops producing an audible snap (col. 2, lines 6-24 and col. 4, lines 11-24).

As per claim 8, Behning discloses a key (23,24) and a key way (26,27) sliding interfitting.

As per claim 9, Behning discloses a circumferential ramp (37) at the same radius as the collar tab, the ramp slanting across the path of the collar tab to cam the collar tab, collar and first body apart and out of engagement with the second body when the collar is manually rotated relative to the mated bodies (col. 4, lines 31-37).

As per claim 10, Behning discloses the spring returns the collar to matching alignment when the bodies are disengaged (col. 4, line 38-40).

As per claim 11, see col. 4, lines 41-44.

As per claim 12, Behning discloses the first and second contacts (2, 8) are male and female contacts (see col. 2, lines 18-24).

As per claim 13, see col. 4, lines 47-48.

As per claim 14, Behning discloses the second body 6,7 includes an engagement recess 6 comprising a circumferential ramp 37, and the receptacle tab 22 protruding from the longitudinal wall, the receptacle tab is formed by the cam surfaces and a back wall.

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As per claims 15-16, these claims recite subject matter substantially similar to claims 1, 3, 9 and 14; therefore, they are rejected under the similar rational.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (703) 305-9772. The examiner can normally be reached on Monday and Thursday from 7:00 am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley, can be reached on (571-272-2001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

A handwritten signature in black ink, appearing to read 'Xuong M. Chung-Trans', with a long horizontal line extending to the right.

X. M. Chung-Trans

Patent examiner

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